This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   **(Cancelled)**.

2.   **(Currently Amended)** <u>A computer-implemented</u> method for scoring a severity of a neurological event associated with a nervous system disorder, the <u>computer-implemented</u> method comprising:

   (a)   determining that a sensed neurological signal represents at least one neurological event;

   (b)   identifying at least one feature of the at least one neurological event to use in scoring, wherein the at least one neurological event is selected from the group consisting of a detection cluster event and a reported event;

   (c)   computing <u>using a processor</u> a score of relative severity of the at least one neurological event using the identified feature; and

   (d)   ranking the at least one neurological event by severity relative to at least one other scored neurological event.

3.   **(Previously Presented)** The method of claim 2, wherein the at least one feature identified in (b) is selected from the group consisting of a duration of a seizure detection, a spread, a number of clusters per unit time, a number of detections within a cluster, a duration of an event cluster, a duration of a detection, and an inter-seizure interval.

4.   **(Previously Presented)** The method of claim 2, further comprising:

   (e)   communicating the ranked events to an external device.

5.   **(Previously Presented)** The method of claim 2, further comprising:

   (e)   displaying the ranked events.

6.   **(Previously Presented)** The method of claim 2, wherein the ranking in (d) is performed by an implanted device.

7.   **(Previously Presented)** The method of claim 2, wherein the identifying the at least one feature in (b) comprises:

      (i)   using algorithm-based measures of activity of the nervous system disorder.

8.   **(Previously Presented)** The method of claim 5, wherein the nervous system disorder is a seizure and the computing the score in (c) comprises:

(i)   relating duration, intensity, and extent of electrographic spread of the nervous system disorder.

9.   **(Cancelled)**.

10.   **(Previously Presented)** The method of claim 2, wherein the feature is selected from the group consisting of a number of monitoring elements involved in the event, a number of clusters per unit time, a number of detections within a detection cluster, a duration of a detection cluster, a duration of a detection, and an inter-seizure interval.

11.   **(Previously Presented)** The method of claim 2, wherein the computing the score in (c) comprises:

(i)   computing a relative severity minimum, wherein the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.

12.   **(Previously Presented)** The method of claim 2, wherein the sensed neurological signal is received from a monitoring element and is selected from the group consisting of a chemical signal, a biological signal, a temperature signal, a pressure signal, a respiration signal, a heart rate signal, a ph-level signal, and a peripheral nerve signal.

13.   **(Cancelled)**.

14.   **(Previously Presented)** The method of claim 2, wherein the nervous system disorder is selected from the group consisting of a peripheral nervous system disorder, a mental health disorder, and a psychiatric disorder.

Claims 15-32. **(Cancelled)**.

33.   **(Currently Amended)** A computer-implemented method for determining the severity of a detection cluster comprising:

(a)   determining that a sensed neurological signal represents a detection cluster;

(b)   identifying at least one feature in the detection cluster;

(c)   computing using a processor a score of relative severity of the detection cluster using the identified at least one feature, wherein the computed score is selected

from a range of at least three values including an upper value and a lower value; and

(d)   ranking the detection cluster by severity relative to previously scored detection clusters.

34.   **(Previously Presented)** The method of claim 33, wherein the at least one feature identified in (b) is selected from the group consisting of a spread of the detection cluster, a number of detection clusters per unit time, a number of detections within the detection cluster, a detection cluster severity, and an inter-seizure interval.

35.   **(Previously Presented)** The method of claim 33, wherein the computing of the score in (c) comprises:

(i)   computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.

36.   **(Previously Presented)** The method of claim 33, wherein the computing of the score in (c) comprises:

(i)   allowing a user to exclude a certain event from being scored.

37.   **(Previously Presented)** The method of claim 33, wherein (b)-(d) occur after the detection cluster has ended.

38.   **(Currently Amended)** A computer-implemented method for determining the severity of a detected neurological event comprising:

(a)   receiving a neurological signal;

(b)   processing the neurological signal to detect a neurological event;

(c)   characterizing at least one feature of the detected neurological event; and

(d)   computing using a processor a score of severity of the neurological event based on the at least one feature, wherein the computed score is selected from a range of at least three values including an upper value and a lower value.

39.   **(Previously Presented)** The method of claim 38, further comprising:

(e)   ranking the neurological event relative to at least one other neurological event, the ranking based on the severity score.

40.   **(Previously Presented)** The method of claim 39, wherein the feature characterized in (c) is selected from the group consisting of a spread of the detection cluster, a number of detection clusters per unit time, a number of detections within the detection cluster, a detection cluster severity, and an inter-seizure interval.

41.   **(Previously Presented)** The method of claim 39, wherein the computing in (d) comprises:

    (i)   computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.

42.   **(Previously Presented)** The method of claim 39, wherein the computing in (d) comprises:

    (i)   allowing a user to exclude a certain event from being scored.

43.   **(Previously Presented)** The method of claim 38, wherein (c)-(d) occur after the detected neurological event has concluded.